## LISTING OF THE CLAIMS

Please amend claims 1 and 7, and add new claims 12-19 as indicated below. This listing of claims replaces all prior versions.

1. (Currently amended) A low-pass filter comprising a large and a small capacitor which are connected in parallel, the large capacitor being connected in series with a resistor, characterized in that the filter is embodied on the basis of a semiconductor substrate with a first surface, in which the small and the large capacitor are each provided as a single vertical trench capacitor[[s]], the trenches extending to the first surface on which the resistor is provided.

2. (Original) A low-pass filter as claimed in claim 1, characterized in that the semiconductor substrate further comprises a drift compensation part.

3. (Original) A low-pass filter as claimed in claim 1, characterized in that one end of the filter is connected to ground.

4. (Original) A low-pass filter as claimed in claim 1, characterized in that the small and the large capacitor are separated by a high-ohmic substrate zone with a resistance of at least 0.5 k Ω/cm.

5. (Original) A low-pass filter as claimed in claim 1, characterized in that the trench capacitors have a dielectric comprising silicon nitride.

6. (Original) A low-pass filter as claimed in claim 1, characterized in that the resistor comprises a layer of polysilicon, in which layer the upper electrodes of the capacitors are defined as well.

7. (Currently amended) A low-pass filter as claimed in claim 1, characterized in that the semiconductor substrate further comprises diodes.

8. (Original) An electronic device provided with a phase locked loop function comprising a comparator, a low-pass filter and a voltage controlled oscillator, the comparator and the oscillator being part of a single semiconductor device and the low-pass filter being embodied by a small and a large capacitor, characterized in that the low-pass filter according to claim 1 is present, which filter is assembled to the semiconductor device in a stacked die construction.

9. (Original) An electronic device as claimed in claim 8, wherein the semiconductor device is provided with a first and an opposed second side, at which first side the low-pass filter is present and at which second side the semiconductor device can be coupled to a heat sink.

10. (Original) An electronic device as claimed in claim 8, characterized in that the low-pass filter has lateral dimensions which are at most equal to those of the semiconductor device.

11. (Original) An electronic device as claimed in claim 8, wherein the phase locked loop is provided in an open loop architecture.

12. (New) A low-pass filter as claimed in claim 1, wherein a capacitance of the large capacitor is an order of magnitude larger than a capacitance of the small capacitor.

13. (New) A low-pass filter comprising a large and a small capacitor which are connected in parallel, the large capacitor being connected in series with a resistor, characterized in that the filter is embodied on the basis of a semiconductor substrate with a first surface, in which the small and the large capacitor are provided as vertical trench capacitors, the trenches extending to the first surface on which the resistor is provided, and characterized in that the small capacitor and the large capacitor are separated by a high-ohmic substrate zone with a resistance of at least 0.5 k Ω/cm.

14. (New) A low-pass filter as claimed in claim 13, characterized in that the semiconductor substrate further includes a drift compensation part.

15. (New) A low-pass filter as claimed in claim 13, characterized in that one end of the filter is connected to ground.

16. (New) A low-pass filter as claimed in claim 13, characterized in that the trench capacitors have a dielectric that includes silicon nitride.

17. (New) A low-pass filter as claimed in claim 13, characterized in that the resistor includes a layer of polysilicon, and upper electrodes of the large and small capacitors are defined in the layer of polysilicon.

18. (New) A low-pass filter as claimed in claim 13, characterized in that the semiconductor substrate further includes diodes.

19. (New) A low-pass filter as claimed in claim 13, wherein a capacitance of the large capacitor is approximately ten times larger than a capacitance of the small capacitor.